

## Evidence Based Guideline

# Phototherapy for Neonatal Jaundice in the Home

**File Name:** phototherapy\_for\_neonatal\_jaundice\_in\_the\_home  
**Guideline Number:** EBG.DME0120  
**Origination:** 12/1991  
**Last Review:** 5/2003

**Active guideline, no longer scheduled for routine literature review.**

### Description of Procedure or Service

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Home phototherapy for [neonatal jaundice](#) is a treatment that involves continually applying ultraviolet light by means of a lamp to an infant in the home for a prescribed period of time. Application of the ultraviolet light helps reduce elevated [bilirubin](#) levels, which can cause brain damage in the infant.

### Evidence Based Guideline for Phototherapy for Neonatal Jaundice in the Home

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Home phototherapy with a fluorescent, tungsten-halogen lamp or fiberoptic system may be appropriate for healthy infants at 35 weeks or more gestation with neonatal jaundice and a total serum bilirubin level of greater than 13 mg/dL who do not require intensive (inpatient) phototherapy and in whom pathologic jaundice has been ruled out.

#### Patient selection guidelines:

1. Term infants, older than 48 hours, otherwise healthy,
2. No elevation in direct-reacting [bilirubin](#) concentration,
3. Elevated [bilirubin](#) is not due to any primary liver disorder,
4. Diagnostic evaluation is negative:
  - ◆ History and physical exam,
  - ◆ Hemoglobin concentration or hematocrit,
  - ◆ White Blood Count and differential count,
  - ◆ Blood smear for red cell morphology platelets,
  - ◆ Reticulocyte count,
  - ◆ Total and direct-reacting [bilirubin](#) concentration,
  - ◆ Maternal and infant blood typing and Coombs test, and
5. Urinalysis including a test for reducing substances [Bilirubin](#) concentrations as listed below indicate consideration of phototherapy:

<u>Age, hours</u>	<u>Consider Phototherapy when total serum <a href="#">bilirubin</a>, mg/dL (<math>\mu\text{mol/L}</math>)</u>
25-48	greater than or equal to 12 (170)

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49-72 greater than or equal to 15 (260)

greater than 72 greater than or equal to 17 (290)

6. Evaluation indicates that home phototherapy is an appropriate treatment modality. (Home phototherapy may be used as an alternative to hospital phototherapy. This policy does not imply that home phototherapy should replace hospital phototherapy or that hospital phototherapy for infants who are eligible for home phototherapy should be considered not medically necessary.)

### **Medical Evidence regarding Phototherapy for Neonatal Jaundice in the Home indicates it is not recommended in the following situations:**

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The 2004 American Academy of Pediatrics (AAP) Clinical Practice Guideline specifies that providing conventional phototherapy either in the hospital or at home is an "option" at TSB levels that are 2-3 mg/dL below the intensive therapy levels but only in infants without risk factors. Infants with hyperbilirubinemia and any risk factors do not have the option for home phototherapy and require intensive phototherapy in the hospital setting.

Risk factors for intensive phototherapy, as specified in the guidelines, are:

- ◆ isoimmune hemolytic disease,
- ◆ G6PD deficiency,
- ◆ asphyxia
- ◆ significant lethargy
- ◆ temperature instability
- ◆ sepsis
- ◆ acidosis

### **Benefits Application**

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Please refer to certificate for availability of benefit. This guideline relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore certificate language should be reviewed before applying the terms of the policy.

Home Phototherapy is covered under the Durable Medical Equipment (DME) benefit. DME supplier must meet eligibility and/or credentialing requirements, as defined by the Plan, to be eligible for reimbursement.

### **Billing/Coding/Physician Documentation Information**

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This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at [www.bcbsnc.com](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

*Applicable codes: E0202*

## Policy: Phototherapy for Neonatal Jaundice in the Home

### Medical Term Definitions

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#### **Bilirubin**

a pigment produced when the liver processes waste products, especially hemoglobin in red blood cells. A high bilirubin level causes yellowing of the skin.

#### **Jaundice**

yellowing of the skin and the whites of the eyes from a bile pigment called bilirubin. It is frequently due to a liver problem.

#### **Neonatal**

pertaining to the first four weeks after birth.

### Scientific Background and Reference Sources

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BCBSA Medical Policy Reference Manual - 12/95

BCBSA Medical Policy Reference Manual - 3/96

Medical Policy Advisory Group - 12/99

Specialty Matched Consultant Advisory Panel - 5/2001

American Academy of Pediatrics. Pediatrics parameter: Management of hyperbilirubinemia in the healthy term newborn. *Pediatrics*, Oct 94 Part 1 of 2, Vol. 94(4):558-564.

Johnson L, Bhutani VK. Guidelines for management of the jaundiced term and near-term infant. *Clin Perinatol*. 1998 Sep;25(3):555-74.

Specialty Matched Consultant Advisory Panel - 5/2003

American Academy of Pediatrics Clinical Practice Guideline: Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation. *Pediatrics* 2004; 114(1):297-316

BCBSA Medical Policy Reference Manual [Electronic Version]. 1.01.07, 11/9/04

### Policy Implementation/Update Information

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| 11/86 | Evaluated: Eligible for coverage with patient guidelines   |
| 7/96  | Revised: National Association reviewed 12/95. Combined Local and National Policy with the only change being neonates with serum bilirubin greater than 18 mg/dL to be reviewed on an individual basis.   |
| 9/99  | Reformatted, Medical Term Definitions added.   |
| 12/99 | Medical Policy Advisory Group  |
| 3/01  | System changes.  |
| 4/01  | Revised. Policy Guidelines changed to reflect bilirubin levels as greater than or equal to a specific level instead of less than or equal to a specific level. Format change.  |
| 5/01  | Specialty Matched Consultant Advisory Panel review (5/2001). Added "near term infant" as eligible for coverage. Changed statement in Policy Guidelines to say "Prior to therapy, a diagnostic evaluation may include:" Added sources to Scientific Background and Reference Sources section. |

**Policy: Phototherapy for Neonatal Jaundice in the Home**

- 7/01 Changed the name of the policy from Home Phototherapy for Neonatal Jaundice to Phototherapy for Neonatal Jaundice in the Home.
- 5/03 Specialty Matched Consultant Advisory Panel review. Policy status changed to: "Active policy, no longer scheduled for routine literature review".
- 5/04 Benefits Application and Billing/Coding sections updated for consistency.
- 8/28/06 Medical Policy changed to Evidence Based Guideline.

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.